Describing Preservice Teachers' Preparations to Teach Record Keeping Techniques

Presented in Partial Fulfillment of the Requirements for

Research with Distinction

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ABSTRACT

"Poor record keeping to blame for inaccurate water testing" (ABC12, 2015). Many Americans are unaware of proper techniques for organizing records. Record keeping can be beneficial in many situations. Therefore, teachers who choose to include record keeping in their curriculum can influence their learners positively. A 2012 study by Ford, Tarpley, and Frazier at Tarleton State University examined the usefulness of the Agricultural Experience Tracker (AET), an online record keeping system, to modernize the pre-service teacher curriculum. Each student was given an account to keep their records. They found students were motivated to record their activities and were prepared to utilize AET in their classrooms. Given other studies conducted throughout the years, the purpose of this study was to describe pre-service teachers' perceptions of preparation to implement the AET record keeping system into their high school curriculum. This study utilized qualitative content analysis on transcripts of a structured focus group of the population to identify themes related to research objectives. In February 2017, a focus group was conducted with ten pre-service teachers in the agricultural science education program at The Ohio State University serving as the population for the study. The participants provided their perceptions of preparation to implement the AET record keeping system into the high school curriculum. The focus group debriefs were all transcribed by a third party to ensure trustworthiness of results. Participants indicated that the AET course prepared them with a basic level of knowledge to use AET. The preservice teachers also asserted that they wanted to learn more. They demonstrated positive feelings after implementation of AET during student teaching while sharing a willingness to continue implementation of AET. Implications of this research could be used in further studies to prepare pre-service teachers to teach record keeping skills through AET.

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CHAPTER 1

INTRODUCTION

Describing Preservice Teachers' Preparations to Teach Record Keeping Techniques

Preparing agricultural science teachers to meet the needs of a changing global environment is critical for career success. Record keeping has been shown to be beneficial in many situations and disciplines in the work force. Teachers who choose to include record keeping skill development in their curriculum have the opportunity to positively influence their learners. Agriscience Education has seen an increased usage of the online record keeping system, Agricultural Experience Tracker (AET), but it is unknown if new agriscience teachers are prepared to utilize AET in their classrooms. Therefore, in the Department of Agricultural Communication, Education, and Leadership at The Ohio State University, the Experiential Learning course offered for students in the pre-service teacher cohort the semester before student teaching incorporates AET into instruction. Students journal on the AET in a variety of ways: reflecting on all their courses and immersion teachings throughout the semester, keeping track of expenses for various teachings, and going through different situations that students may have on the AET. We believe that educating preservice (undergraduate student) teachers using tools they will be expected to use in the classroom prepared them for both student teaching and their future careers.

In order to determine how to best help preservice teachers in the Agriscience Education major, it is important to understand their perceptions of using AET. Roger's Innovation-Decision Process (1983) demonstrates the stages by which individuals accept or reject new innovations. The Innovation decision process is influenced by: perceptions based on prior conditions of the social system; perceived characteristics of the

innovation; and characteristics of the individual making the decisions. Figure 1.1 below illustrates the process that individuals go through when accepting or rejecting, beginning with prior knowledge, persuasion for others, making the decision, implementing the said decision, and confirming their decision based on the implementation.

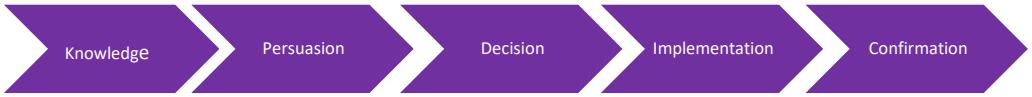

Figure 1.1. A Conceptual Image for Roger's Innovation-Decision Process (Nicol, 2017).

Statement of the Problem

Through previous research, it has been determined that individuals should have record keeping skills to excel in the workplace and it is often overlooked in our academic curriculum. In other previous research, it has been shown that preservice and new teachers' inadequacies in teaching record keeping, can be modified by teacher educators' expanding their curriculum. The researchers are interested in conducting this study to help to continue developing the preservice teacher preparation program at The Ohio State University. The conclusions from this study will be applied to improving the current teacher preparation program. However, little data has been formally collected using strategic research methodologies. Therefore, no formalized assessment has been conducted to scientifically make informed recommendations for continuous improvement to the preservice teacher curriculum.

Purpose of the Study

The purpose of this study was to describe perceptions of preservice teachers in Agriscience Education toward A Modern Philosophy of Immersion for Teacher Preparation.

Research Objective Guiding the Study

The objective was to describe perceptions of preservice teachers' preparation to implement Agricultural Education Tracker (AET).

Definition of Terms

Constitutive Definition

Immersion Experiences - "a 21st century curriculum of immersion in agriscience teacher preparation, is one that mixes non-traditional context-setting with traditional, tested teaching approaches like problem-solving, and adds delivery strategies like experiential learning to weave A Modern Philosophy of Immersion for Teacher Preparation" (Whittington, 2014, p. 1).

Operational Definition

Student Preparedness – Students' self-reported level of preparation to engage in selected immersion activities related to the professional block

Knowledge - Anything participants learned through the AET class or training, exploring the product

Persuasion - Outside variables (teachers, books, samples, not individually controlled) impacting decisions to implement the AET

Decision - Deciding whether or not to implement AET in the future, hesitance, indicated adoption, internal reflection

Implementation - Usage of the AET, explicit action

Confirmation - Through usage, having more information to support the decision

Limitations of the Study

Participation in this study was limited to preservice teachers in the 2016 professional block at The Ohio State University.

CHAPTER 2

REVIEW OF LITERATURE

Conceptual Framework

The term *immersion education* came to prominence in Canada during the 1960s to describe innovative programs in which the French language was used as a medium of instruction for elementary school students whose home language was English (Cummins, 1998). In the United States, two-way immersion (TWI) is an educational approach that integrates native English speakers and native speakers of another language for content and literacy instruction in both languages (Howard & Christian, 2002). Considerable research has demonstrated the effectiveness of the model for both native English speakers and native Spanish speakers (Howard & Christian).

Merriam-Webster (2015) defined *immersion* as, complete involvement in some activity or interest. Consequently, this study does not incorporate *immersion education* experiences to the extent utilized by Howard and Christian (2002), but for the purposes of this study, the model meets the definition of Merriam-Webster. In this study, "a 21st century curriculum of immersion in agriscience teacher preparation, is one that mixes non-traditional context-setting with traditional, tested teaching approaches like problem-solving, and adds delivery strategies like experiential learning to weave A Modern Philosophy of Immersion for Teacher Preparation" (Whittington, 2014, p. 1).

A Modern Philosophy of Immersion for Teacher Preparation (see Figure 1), is reflective of *immersion education* (Howard and Christian, 2002). Through context-setting, problem solving, experiential learning, and assessment opportunities, preservice teachers gain valuable experiences before entering student teaching (short term) and

careers (long term). Developing a series of immersion experiences for preservice agriscience teachers provides opportunities to reinforce cognitive learning of educational theory, concepts, and principals. The immersion also provides psychomotor activity related to integration and application of content and experience in 21st century, global, agriscience classrooms. In this study, the researchers were interested in describing the final immersion experience in the model (see Figure 1). The final immersion experience provided an opportunity for preservice teachers to teach learners in a 21st century, global, agriscience classroom.

Preparation to teach record keeping techniques

In 2012, Ford, Tarpley, and David Frazier examined the usefulness of the Agriculture Experience Tracker as a record book versus the older version of the paper based books. At Tarleton State University, they wanted to implement the AET to create a more modern curriculum for their pre-service teachers. This is to make them more prepared to use AET with their students in the classroom. The Tarleton students were given their own accounts to record their experiences in college with their extra-curricular activities and classes. After the implementation, the students found that it was easier to document what they've done due to the accessibility of the electronic system. They also found it was easier to make resumes since all their experiences were already documented. The academic department found they were able to use these records to track awards and accomplishments for the students and the students were more motivated to record their activities on time. In addition, the students were better prepared to use this system in their classrooms (Ford et al., 2012).

In 1978, Davis and Williams at Iowa State University's Agricultural Education Department conducted research with their agriculture education students to see if the previously identified occupational ability of keeping records could be developed in their students through program records with Supervised Agricultural Experiences. Their study was designed to see if there was an importance of SAE record keeping in developing abilities among the agriculture education students of all ranks at Iowa State University. They used mailed questionnaires that asked the respondents to indicate on a scale of 1-11 how their SAE program record keeping skill was important in developing a list of 27 abilities. They found that the top five list of abilities pertained to record keeping with variations among the different ranks of students. The SAE program records were of more importance in developing abilities related to record keeping procedures and agriculture production. They concluded that preservice teacher education should include the instruction of record keeping and that those instructions should be pertaining to SAE programs (Davis et. al., 1978).

In 1999, Layfield and Dobbins at Clemson University produced a scientific study to assess needs and competencies of South Carolina agriculture teachers using a list from a previous study, the Borich Needs Assessment model, which lists 50 competencies for teachers to have that they can receive through in-service professional development opportunities. Their population was a census of beginning (1-5 years) and experienced teachers (>5 years) in South Carolina. They mailed out packets to these teachers with instructions to rank the 50 competencies based on their level of importance to them. The results were viewed by a panel of faculty members in the department at the university. They established a set of top 5 in-service needs for experienced teachers, including using

computers in the classroom, and teaching record keeping skills. They also established a list for the top 5 needs for beginning teachers, which included FFA needs with awards and contests and developing SAE opportunities for students. These results can be generalized to the population of agriculture teachers in South Carolina in each respective category. They recommend that there should be more research conducted in other states so that it can be generalized nationally. They also recommend developing curriculum for teachers at the university to address and develop these desired skills (Layfield et. al., 1999).

Coley, Warner, Stair, Flowers, and Croom conducted research in 2011 on 312 Tennessee agriculture teachers in the 2011-2012 school year to assess the availability of technology in the classroom and teacher preparedness to utilize this technology and how much they actually use it. They used Survey Monkey, an internet based survey system, to send to this population asking questions about the teacher's adoption of technology, where they were trained, accessibility to the technology, and any barriers they had along with demographic questions. The responses were assessed by a team of university faculty and agriculture teachers. They concluded that Tennessee agriculture teachers were slow to adopt the technology and that many had limited access to technology in the first place due to cost and not willing to try something new. They recommend adding professional development opportunities that reflect current technology usages, but do not discourage teachers that cannot have access to those technologies. Also, they noted that the NAAE has started a technology resource bank where teachers can post lessons that incorporate technology and teachers can have discussions with each other about them. They also wish to capitalize on pre-service teachers that are more current with technologies, because

universities often have more access to these newer technologies, by utilizing them in their learning and their teaching opportunities throughout their program (Coley et. at., 2015).

Leggette, Witt, Dooley, Rutherford, Murphrey, Doerfert, and Edgar conducted research on experiential learning using Second Life (SL), a virtual environment simulation tool used in a graduate level agricultural risk and communications course at Texas Tech University in 2010. They wished to see in the SL was a good supplement for the course based of student perceptions and if the SL impacted student's learning. There were 16 students in the once a week, 3 hours class with resident, masters, and doctorate students and a mixture of agriculture communication, education, mass communications, and interdisciplinary studies majors. TO complete this research, the students were asked to write in their online journal each week of the 14 weeks of the semester. They were encouraged, but not required, to write about their SL experiences. The researchers examined all 199 entries and found that 14 of the 16 students discussed their SL experience at least 3 times. They evaluated the responses that talked about SL using content analysis (qualitative data). They found common themes in these journal entries such as context, anxiety, capabilities, and suggestions for further use and that the students found SL to be a valuable tool in their learning in this course. They also gave caution that educators should be careful with their choices of technologies to use in the classroom. The journaling, they found, enhanced the student's learning by reflecting and putting their thoughts together. They recommend that students receive more training on how to use the program and further analysis on student's perceptions of using the technology (Leggette et. al., 2012).

CHAPTER 3

METHODOLOGY

Purpose of the Study

The purpose of this study was to describe perceptions of preservice teachers in Agriscience Education toward A Modern Philosophy of Immersion for Teacher Preparation.

Research Objective Guiding the Study

The objective guiding the study was to describe perceptions of preservice teachers' preparation to implement Agricultural Education Tracker (AET).

Methodology. The study utilized qualitative content analysis of transcripts of a structured focus group to identify themes related to research objectives. The population for this study was ten preservice teachers in agricultural education at the university level. The focus group debriefs were transcribed by a third party to ensure trustworthiness of the results.

Target Population

Population. The population (N=10) for this study was the 2016 pre-service agriscience teachers, in professional standing, at The Ohio State University. The research design focused on pre-service teachers during classroom and program immersion experiences. Pre-service agriscience teachers in professional standing, the semester before student teaching, are enrolled in a set of courses referred to as The Pre-service Professional Block (*The Block)*. Within *The Block*, students are provided experiences that immerse them in content delivery and classroom management. Data was collected after *The Block*

experience while participants were at their cooperating schools. The researcher described the pre-service immersion philosophy, and drew conclusions regarding student perceptions of the immersion experiences in meeting the needs of pre-service teachers.

Response Rate

Data collection. As an approach to integrating an immersion philosophy in pre-service teacher education, faculty and staff implementing the pre-service agriscience teacher program at The Ohio State University developed several immersion experiences for pre-service teachers. The experiences included opportunities for pre-service teachers to plan, teach, and engage with adult, adolescent, and elementary learners in formal and non-formal learning environments, and to reflect upon their experiences. As an example, one of the immersion experiences developed for pre-service agriscience teachers included teaching diverse student populations in an urban school, which is a non-traditional pre-service agriscience learning environment. Additional immersion experiences included, teaching learners with Individualized Education Plans and 504 Plans in a non-school environment, teaching in traditional rural learning environments, teaching agricultural literacy in an affluent suburban elementary school environment, and teaching in non-formal adult learning environments. After these immersions and while students were student teaching in their cooperating schools, the pre-service teachers came back once a month throughout the three month teaching experience for seminars. During one of these seminars is where data was collected.

Gaining access. Gaining access refers to the researcher's acquisition of consent to go where one wants, talk to whomever one wants, and obtain the information wanted for the

study (Yin, 2014). The researcher followed the procedures outlined by Glesne (1999) to gain access with each participant by guaranteeing confidentiality and anonymity prior to data collection. To guarantee confidentiality and anonymity, the researcher had participants exclude their name from the written form utilized for discussion. The researcher also assured participants that their names would never be connected with their numbers for any reason during the study. The written responses as well as the audio that was transcribed by a third party gave random numbers to the participants.

All data, for the pre-service teachers, were collected at the one seminar during an hour time slot.

Instrumentation. The instruments included a written reflection, and focus group discussion over the questions asked in the written portion. Instruments provided opportunity for an in-depth examination of the pre-service teacher experience using the AET both in *The Block* and in their cooperating school, and to explore the preparedness of pre-service agriscience education students to enter diverse educational settings and to teach agricultural science and incorporate record keeping.

Post- reflection protocols. During an allotted time at the seminar, data was collected from the pre-service teacher's experiences, which occurred after related material was presented in lecture during the previous semester in *The Block*. Students completed a short, written, post-reflection with guiding questions. [Appendix A]

Group interview protocols. A group discussion was conducted after the written response reflection time during the same seminar. Students were asked the same guiding questions they had a chance to write about [Appendix A]. Once students completed their personal reflections, each of the guided questions were asked aloud by the researcher. Each

participant was given a chance to respond verbally to each question and the discussion was recorded.

Data management and analysis. All data was securely handled. This helped to ensure the analysis process had no effect on the course outcomes for the participants. Recordings of the group interviews, having received permission from the participants, were stored in the researcher's computer files. The electronically-recorded interviews were transcribed, word-for-word. The transcriptions were modified based on comments received during the member check, and the documents were stored in the researcher's secured computer files. The initial analysis of the data involved reading and coding of the post- reflections. Themes that emerged were coded accordingly.

Role of the researcher. The study was conducted from interpretivism epistemology. Interpretivism assumed that realities were socially constructed by participants in the study and that variables were complex and interwoven (Glesne, 1999). Thus, the researchers served as the data collection instrument and meanings were created through the researcher's interpretation of the participants' realities (Schwandt, 2000). The data gathered from participants were filtered through the feelings and experiences of the researcher as the data collection instrument to generate the complete data for the study (Patton, 1990).

Ethical considerations. The researcher committed to the guidelines outlined by Christians (2000). Thus, informed consent was established by providing full and open information about the study. Participants were also informed that their participation or non-participation would have no effect on course outcomes. Students were also made aware that by participating in the study, they were agreeing to have their reflections saved

anonymously for data analysis. Participants also knew that they could choose to not respond to a particular question. The researcher avoided deception by being honest with participants about their status and the purpose of the research. The researcher guaranteed privacy and confidentiality to all participants, by tracking all data with randomly assigned numbers instead of names, initials, or aliases.

Limitations. A limitation of the study included over-use of reflections for data collection. The researchers could not control the number of additional reflections that participants were asked to complete during regularly scheduled coursework associated with the professional block. Also, the population was limited as there were only 10 pre-service teachers that were completing their studies to conduct a focus group with.

Trustworthiness of the study. Trustworthiness was explained by Lincoln and Guba (1985) as encompassing the conventional components of internal validity, external validity, reliability, and objectivity. Lincoln and Guba proposed that conventional measures of quality were not appropriate for qualitative inquiries, and that the measure of trustworthiness was appropriate. The components of trustworthiness included credibility, transferability, dependability, and confirmability.

Credibility, or the likelihood that credible findings and interpretations were produced, was addressed in the study by using methods outlined by Lincoln and Guba (1985). Triangulation, the use of multiple sources of data collection methods, was guaranteed by utilizing the written reflection as well as the audio transcript. Peer debriefings were conducted throughout the duration of the study to probe the researcher's biases, explore the researcher's meanings, and clarify the researcher's interpretations.

Peer debriefings were conversations with a peer that provided the researcher with a mode of external reflection to explore aspects of the study that had not been explored.

Transferability addressed the question, “How can one determine the degree to which the findings of an inquiry have applicability in other contexts or with other respondents?” (Lincoln & Guba, 1985, p. 218). The current study provided a thick description allowing other researchers to decide if making a transfer between the current study and future studies is possible. A thick description referred to providing enough evidence of the study to allow readers to determine if transferability of findings is possible.

Dependability and confirmability were established through an analysis of the audit trail maintained by the researcher. Dependability referred to the likelihood of the findings being repeated if the study was replicated with the same participants in the same environments. Confirmability ensured that the findings reflected the characteristics of the participants in the given setting, not the biases, motivations, interests and perspectives of the researcher (Lincoln & Guba, 1985).

CHAPTER 4

RESULTS

Written Responses on AET Usage

Results from Student 1:

Describe how Block prepared you to use AET.

- *ODE Class, record our time in and out of classes*
- *Assignments like creating events*
- *"Goat"*

Describe your experiences with AET during Student Teaching.

- *Proficiency Awards*
- *Degrees*
- *Helping students record*
- *Evaluations*

Describe your confidence with using AET as a teaching tool.

I think I can help my students record information but using the calendar, POA, etc is something that I struggle with.

Im also worried that I will make errors and when my students try to get Degrees/Awards AET will show errors.

Results from Student 2:

Describe how Block prepared you to use AET.

[Teacher] was very good at explaining.

I actually used her example SAE project WS for teaching my AFNR students.

Her guide book is very helpful.

Describe your experiences with AET during Student Teaching.

- *I had to teach AFNR students*
- *I had to review with other grades*
- *Reviewing/fixing AET for State Degrees and Proficiencies → I learned a lot!*
- *Easier than grading paper books at evaluation.*
- *Would like to have more class time to help.*

Describe your confidence with using AET as a teaching tool.

I think it is great to teach kids the importance of record keeping. Helps teach SAE. I can do it on the board and students can follow along on their iPADs. Once they do it they see its easier.

Results from Student 3:

Describe how Block prepared you to use AET.

Block didn't quite prepare me as much as I thought it did. After Block I thought I had a pretty good handle on AET, but getting into the classroom and students asking questions, I don't know as much as I thought I did. However, this could be because I don't know the students projects. I think knowing the students and their projects has a lot to do with understanding AET. Even after using AET in Block, I feel I will still have to take AET school with [Teacher] later.

Describe your experiences with AET during Student Teaching.

It was good. I had never used AET in high school so I think learning the basics of it was good for me. I still don't know as much as I'd like to know.

Describe your confidence with using AET as a teaching tool.

On a scale of 1 to 10, I feel my confidence level is probably a 6. Because I never used it before Block I still have a lot to learn. But I know how to navigate it and enter stuff.

AET makes degree and proficiency applications much easier.

Results from Student 4:
Describe how Block prepared you to use AET.

- *Good in theory, but its hard to understand until you actually have to do it.*
- *Making time is important*

Describe your experiences with AET during Student Teaching.

- *Haven't messed with it much so far*
- *Answered a few general questions*
- *Again its hard to work with it when you don't know the student or the project*

Describe your confidence with using AET as a teaching tool.

Love the idea of AET (I never did paper books) I just need to work with it more in real situations

Results from Student 5:
Describe how Block prepared you to use AET.

It felt fast and more covered than thought.

I'm still very confused on it.

Describe your experiences with AET during Student Teaching.

Have not had many yet. AET Degree apps are much easier to evaluate than old record books which I discovered at sub-district and regional evaluations.

Describe your confidence with using AET as a teaching tool.

I believe it is learnable but I need more practice with it before I would feel confident

Results from Student 6:
Describe how Block prepared you to use AET.

I learned about entering data and it gave me a good baseline knowledge

Describe your experiences with AET during Student Teaching.

I helped kids input material for AET for Degrees and Proficiencies

Describe your confidence with using AET as a teaching tool.

~~*None*~~

Journals in class

Results from Student 7:
Describe how Block prepared you to use AET.

- *ODE class with [teachers] helped some (like a 6/10 on the help scale)*
- *I learned from the main functions of AET – the basics – such as journals, where/how to document finances, etc.*
- *Book from [Teacher] is very helpful!*

Describe your experiences with AET during Student Teaching.

- *I have learned much more since starting student teaching!*
- *I have learned how to teach AET functions to students – Basic ones!*
- *I have learned some of how to check AET wit applications versus paper books (I'm at like a 6/10 on comfort level with that).*
- *I've seen how important teaching AET is for ALL students because it teaches an important skill – record keeping!!*
- *Having a laptop cart is very helpful!*

Describe your confidence with using AET as a teaching tool.

- *6/10-ish!*
- *It is a monthly grade @ my placement (20 journal entries /month) which helps!*
- *I feel 9/10 confident with journal functions*
- *6/10 with finance functions*
- *6/10 with using it for apps (degrees, proficiencies)*

- *8/10 on the calandar/event functions*
- *10/10 on using it as a record-keeping tool for classroom use!*
- *GREAT for weird days that stretch time for class content (2-hr delays, pep rallys, early releases, etc.)*
- *Students @ my placement are given in-class instruction AND time in class (*some*) to work on their AET BUT it is primarily a self-driven project*
- *Giving it a grade makes *most* students keep up with it*
- *It at times (@ my placement) seems like a "busy work" type of assignment so I want to know more about how to make it something of substance.*
    - *Maybe create a small unit on record-keeping for all classes for every year? I'm not sure… just a thought I've had.*
- *AET>>>paper books!!*

Results from Student 8:
Describe how Block prepared you to use AET.

1. *[Teachers] "tried" to help us with it. I do not think their approach was successful but I do think some components were.*
2. *The book was great!*

Describe your experiences with AET during Student Teaching.

My freshman have FFA Wed. but that's it.

Describe your confidence with using AET as a teaching tool.

- ➔ *I'm confident in using AET but that is from my own experience, not from Block or student teaching.*
- ➔ *I think using this as a "grade" is great but also having days to teach them for records.*

Results from Student 9:
Describe how Block prepared you to use AET.

I had never used AET before, so I got some basics of logging in ans what not, but block did not prepare me very well at all. I am no where near proficient in my AET usage.

Describe your experiences with AET during Student Teaching.

I attempted to help w/state degrees and proficiencies, but again, I don't really know how to use AET very well so it was more time consuming teaching me how to use it for certain things that it was for me to help.

Describe your confidence with using AET as a teaching tool.

None

Results from Student 10:
Describe how Block prepared you to use AET.

- *Better understanding of what it was*
- *Figured out how to set it up*
- *Better understanding of how to teach students to use it*

Describe your experiences with AET during Student Teaching.

- *I taught the very first class of AET at [school]*
- *Got all the AFNR students on AET*
- *3 week unit*

Describe your confidence with using AET as a teaching tool.

I feel much better than I did before block and think it is a great tool.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions for Preparations to Teach AET

Preservice teachers feel AET course work prepared them with basic knowledge to use AET.

While a basic knowledge was gained from the course, preservice teachers also asserted that they would like to learn more.

Preservice teachers demonstrated positive feelings after implementation of AET during student teaching ,which led to a willingness to continue implementation.

Recommendations

The researcher recommends that in the following years, the block process allows pre-service teachers to continue to journal and reflect on their experiences in their immersions as well as with their cooperating schools and in their academic courses. Students should be encouraged to truly reflect in their journals and to immerse themselves into the AET both to be more engaged in their experiences and to prepare themselves to use the AET in their classrooms. In addition, the research recommends that students be given more opportunities for professional development to use the AET situationally and be given scenarios that they may encounter in the classroom to help prepare them for the real classroom.

Recommendations for Further Research

The researcher recommends that this study be expanded upon in the future. The first way this study can be expanded upon is by conducting a follow-up survey with the students from the 2016 professional block as most of them are placed in teaching jobs across the state. This will allow the researchers to see how they are utilizing the AET in their own classrooms after they have become familiar with the students and are managing their own classroom. This will also serve as an assessment tool for the "block" process for future classes. The researcher's other recommendation for further research is to continue the same or similar research methods with the next block class to compare the results and to add to the population being studied.

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APPENDIX A

WRITTEN RESPONSE AND MODERATOR QUESTIONS

Describe how Block prepared you to use AET.

Describe your experiences with AET during Student Teaching.

Describe your confidence with using AET as a teaching tool.

APPENDIX B

PANEL OF EXPERTS

1. Dr. M. Susie Whittington, Professor, Teacher Education
2. Caitlyn Black, MS Student
3. Aaron Giorgi, Ph.D. student